Broadband

CREATIVE®

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DSL Router

User's Guide

User's Guide

Creative Broadband Blaster DSL Router 8015U

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Contents

Contents

Introduction

DSL Router information v
Package Contents v
System requirements vi
Using Ethernet connection vi
Using USB connection vi
Using this document vii

1 Installing your DSL Router

Setting up your DSL Router 1-3
Using the Ethernet port 1-3
Using the USB port 1-5

2 Configuring Your Network Interface Card

Before You Begin 2-1
In Windows XP/Windows 2000 2-1
In Windows Me/Windows 98 SE 2-4

3 Installing the USB Driver

Installing the USB Driver 3-1
In Windows XP 3-1
In Windows 2000 3-4

In Windows Me 3-7
In Windows 98 SE 3-9

4 Configuring your DSL Router

Understanding DSL Router configurations 4-1
Connecting to your DSL Router's Home Page 4-2
Configuring your DSL Router 4-3
PPPoA/PPPoE Configuration 4-3
RFC 1483 Routed 4-6
RFC 1483 Bridged IP Configuration 4-9
Disabling the Proxy Server 4-11
Using Internet Explorer 4-11
Using Netscape Communicator 4-12
Disconnecting from the Internet 4-13
In PPPoA and PPPoE Mode 4-13
In RFC 1483 Routed Mode 4-13
Checking your DSL Router's Status 4-13

5 Configuring Advanced Features

Upgrading Firmware 5-1
Changing Password 5-2
IP Address Filter 5-3
DMZ 5-4
Port Forwarding 5-5
LAN Client Table 5-6
MAC Address Filtering 5-7

Appendixes

A Technical Specifications

B Troubleshooting

Connection to your DSL Router's home page B-1
Connection to the Internet B-2
LED Status B-3
    Normal Setup Status B-3
Difficulties In Windows XP B-5

C Frequently Asked Questions

D Glossary

CREATIVE

BROADBAND BLASTER DSL ROUTER

Introduction

Introduction

Thank you for purchasing Creative Broadband Blaster DSL Router 8015U. Developed with the most advanced Digital Subscriber Line (DSL) today, the DSL Router provides you with high-speed broadband Internet connection using an existing phone line. Enjoy speedy file transfers, watch Internet movies, video-conference, and view videos without any long waits. You can also surf the Internet and make a phone call at the same time!

Your DSL Router can be connected to your computer using a USB or Ethernet port. Compliant with both ITU G.Lite and G.DMT, your DSL Router is capable of DSL full-rate operation up to 12 Mbps downstream and 1 Mbps upstream, depending on your subscription with your Internet Service Provider.

DSL Router information

Before you begin, write down your DSL Router's model and serial numbers found at the bottom of your DSL Router.

Package Contents

- ❑ Creative Broadband Blaster DSL Router 8015U
- ❑ USB cable
- ❑ Straight Ethernet cable
- ❑ RJ-11 phone cable
- ❑ Power adapter
- ❑ Installation CD
- ❑ Quick Start Leaflet
- ❑ Microfilter

System requirements

In order for your DSL Router to operate properly, be sure that your computer meets the following minimum system requirements:

You will need a hub if you wish to connect more than 2 computers to your DSL Router.

Using Ethernet connection

- ❑ Compatible with all operating systems.
- ❑ 20 MB of free hard disk space
- ❑ 32 MB RAM
- ❑ Installed Network Interface Card (NIC)
- ❑ CD-ROM drive for software installation
- ❑ Microsoft® Internet Explorer version 5.0 or later/Netscape Communicator™ version 4.68 or later

Depending on your computer's configurations, you can choose to install your router using the Ethernet or USB port.

Using USB connection

- ❑ Intel® Pentium® II 300 MHz or equivalent processor
- ❑ Microsoft Windows® XP, 2000, Me (Millennium Edition) or 98 SE (Second Edition)
- ❑ 20 MB of free hard disk space
- ❑ 32 MB RAM
- ❑ USB port
- ❑ CD-ROM drive for software installation
- ❑ Microsoft Internet Explorer version 5.0 or later/Netscape Communicator version 4.68 or later

Using this document

These icons highlight useful or urgent information:

- Tip. This tells you about shortcuts or hints relating to a feature.

- Note. This highlights additional or important information about a feature.

- Caution! This highlights proper usage of your device. Use this information to avoid situations involving risk.

- Warning! This warns you of possible hazards to yourself or your device, which may result in injury or damage.

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1 Installing your DSL Router

Installing your DSL Router

This section will guide you through the process of setting up your DSL Router. Place your DSL Router in front of you as you go through this section to help you to identify the various components of your modem.

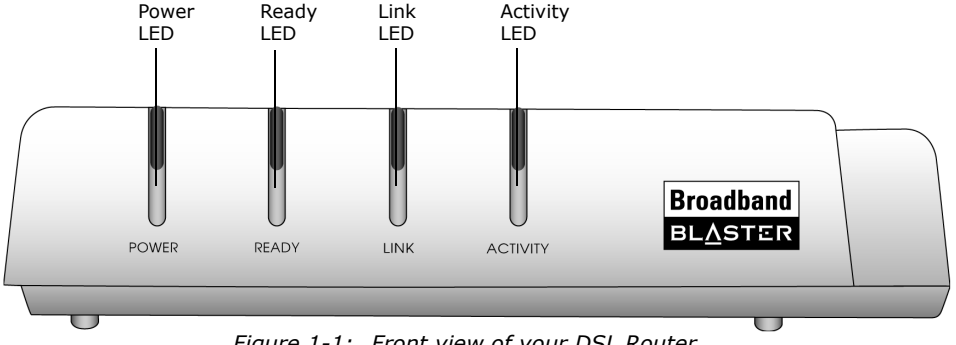

Figure 1-1: Front view of your DSL Router

LED	Indication
POWER	LED lights up when your DSL Router is connected to a power source.
READY	LED flashes when your DSL Router is initializing the DSL connection. LED lights up when DSL connection is ready.
LINK	LED lights up when the Ethernet or USB port is connected to your computer.
ACTIVITY	LED flashes when there is data transfer to or from the Internet.

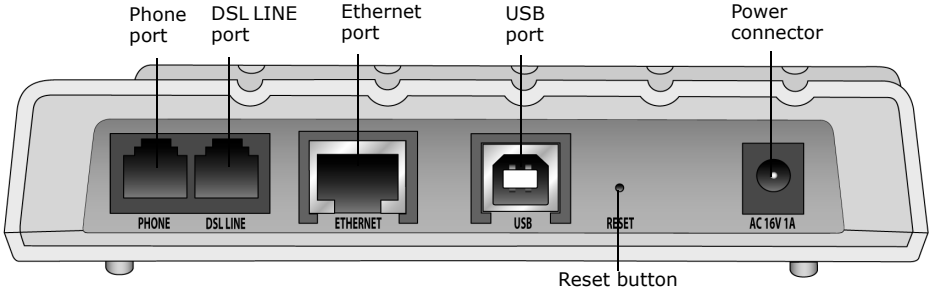

Figure 1-2: Back view of your DSL Router

Port/Connector	Indication
PHONE PORT	Connects to the telephone via a microfilter.
DSL LINE PORT	Connects to the telephone wall outlet using the provided RJ-11 phone cable.
ETHERNET PORT	Connects to the Ethernet port on your computer using the Straight Ethernet cable. If you are connecting your DSL Router using the Ethernet port, do not connect the USB port on the same computer.
USB PORT	Connects to the USB port on your computer using the USB cable. If you are connecting your DSL Router using the USB port, do not connect the Ethernet port on the same computer.
RESET BUTTON	Resets your DSL Router's settings to the factory default settings.
POWER CONNECTOR	Connects to the power outlet using the provided power adapter.

Setting up your DSL Router

Depending on your computer's configurations, you can choose to install your DSL Router using the Ethernet or USB port on the same computer. Do not install your DSL Router using both connections on the same computer.

Using the Ethernet port

Before setting up your DSL Router, be sure that the Network Interface Card in your computer is installed and functioning properly.

Use Figure 1-3 as a reference when following these instructions to set up your DSL Router.

1. Connect the straight Ethernet cable to the Ethernet ports on your computer and DSL Router.

DO NOT use the USB port on your DSL Router if you are using the Ethernet port on the same computer.

If you want more than 2 computers to have access to your DSL Router through a hub, you may need to use a crossed Ethernet cable to connect your DSL Router to the hub. Consult your hub's manual for details.

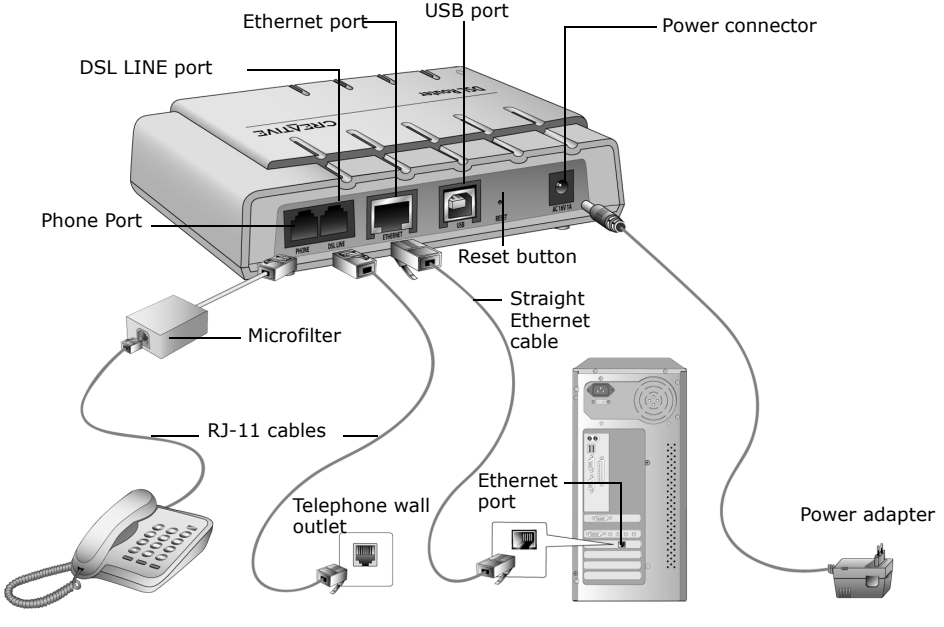

Figure 1-3: Setting up your DSL Router using the Ethernet port

2. Locate a telephone wall outlet and unplug any telephone cable that is connected to it.
3. Connect one end of the RJ-11 phone cable provided into the telephone wall outlet.
4. Connect the other end into the DSL LINE port of your DSL Router.
5. Connect the small round plug of the power adapter provided to the DSL Router's power connector and plug your power adapter into a power outlet.
6. Turn on the power supply.
7. If you have telephones and fax machines sharing the same phone line, connect them to the telephone wall outlet or DSL LINE port with microfilters as shown below. The microfilters will help to ensure voice and data quality.

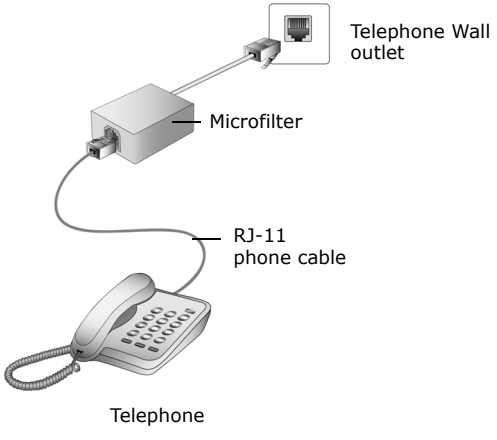

Figure 1-4: Connecting a telephone to the telephone wall outlet

8. Before using your DSL Router, you will need to configure your Network Interface Card. For detailed instructions, refer to Chapter 2, "Configuring Your Network Interface Card".

Using the USB port

DO NOT use the Ethernet port on your DSL Router if you are using the USB port on the same computer.

Use Figure 1-5 as a reference when following these instructions to set up your DSL Router.

1. Connect the USB cable to the USB ports on your computer and DSL Router.

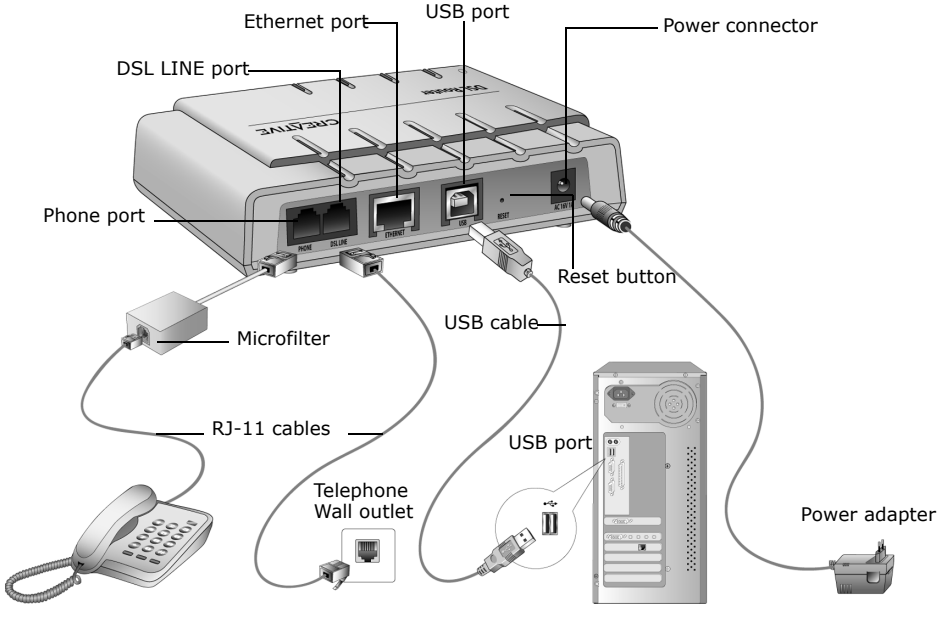

Figure 1-5: Setting up your DSL Router using the USB port

2. Locate a telephone wall outlet and unplug any telephone cable that is connected to it.
3. Connect one end of the RJ-11 phone cable provided into the telephone wall outlet.
4. Connect the other end into the DSL LINE port of your DSL Router.

5. Connect the small round plug of the power adapter provided to the DSL Router's power connector and plug your power adapter into a power outlet.
6. Turn on the power supply.
7. If you have telephones and fax machines sharing the same phone line, connect them to the telephone wall outlet or DSL modem phone port with microfilters as shown below. The microfilters will help to ensure voice and data quality.

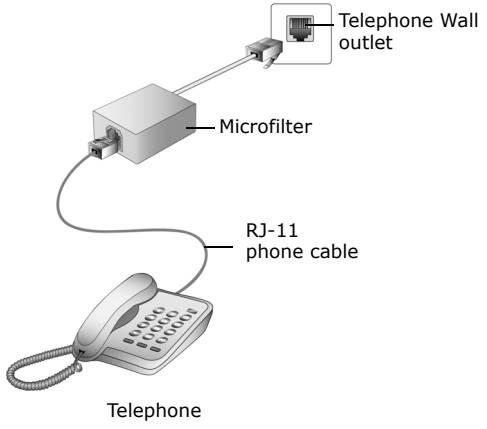

Figure 1-6: Connecting a telephone to the telephone wall outlet

Before using your DSL Router, you will need to install the USB driver. For detailed instructions, refer to Chapter 3, "Installing the USB Driver".

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2 Configuring Your Network Interface Card

Configuring Your Network Interface Card

Before You Begin

Before using your DSL Router, you need to configure your Network Interface Card.

If you are connecting your DSL Router using the USB port, skip this chapter and go to "Installing the USB Driver" on page 3-1.

In Windows XP/Windows 2000

1. After setting up your DSL Router, turn on your computer.
2. In Windows XP, click **Start -> Settings -> Control Panel** and double click the **Network Connections** icon**.** In Windows 2000, click **Start -> Control Panel** and double click the **Network and Dial Up Connections** icon.
3. When the window similar to Figure 2-1 appears, right-click the **Local Area Connection** icon, and then click **Properties**.

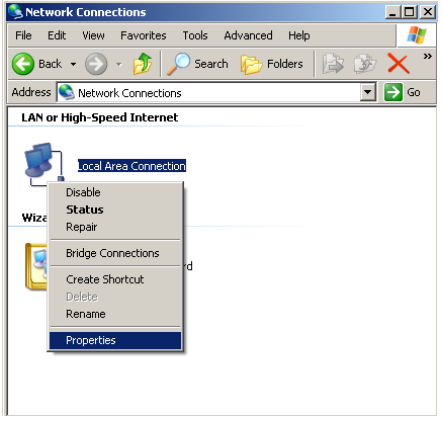

Figure 2-1

4. When the dialog box similar to Figure 2-2 appears, be sure that the name of your network card is displayed in the first box.
5. In the list below the box, click the **Internet Protocol (TCP/IP)** check box to select it.
6. Click the **Properties** button.

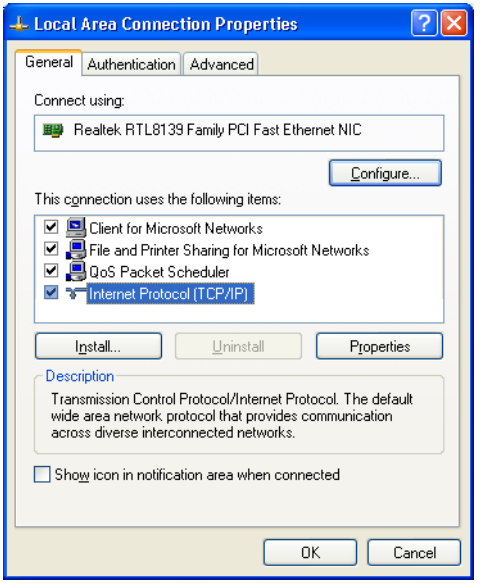

Figure 2-2

7. When the dialog box similar to Figure 2-3 appears, click **Obtain an IP address automatically** option, and then click the **OK** button.
8. When the **Local Area Connection Properties** dialog box appears, click the **OK** button.

After configuring your Network Interface Card, you need to configure your DSL Router. See "Configuring your DSL Router" on page 4-1.

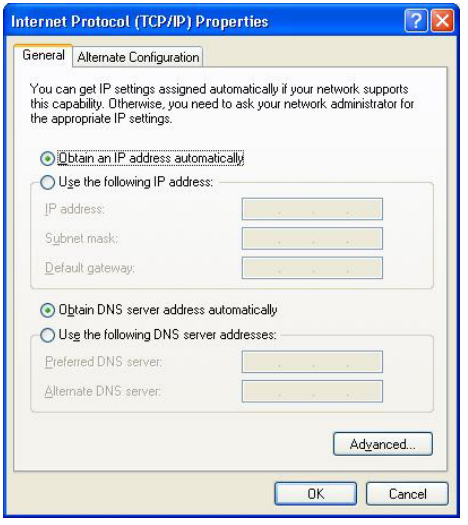
Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

Figure 2-3

In Windows Me/Windows 98 SE

1. After setting up your DSL Router, turn on your computer.
2. Click **Start -> Settings -> Control Panel.**
3. When the dialog box similar to Figure 2-4 appears, double-click the **Network** icon.

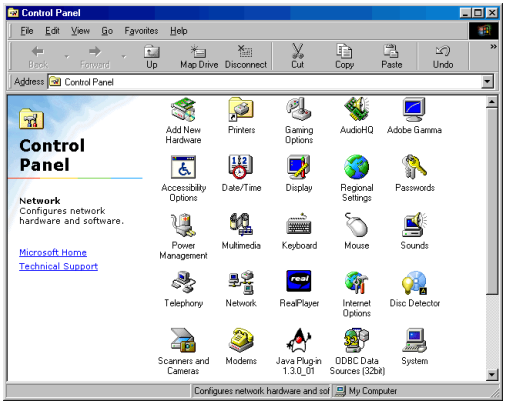

Figure 2-4

4. When the dialog box similar to Figure 2-5 appears, click the **Configuration** tab.
5. Click the adapter that has the name of your Ethernet card, for example, **TCP/IP->Intel 8255x-based PCI Ethernet Adapter (10/100)**.
6. Click the **Properties** button.

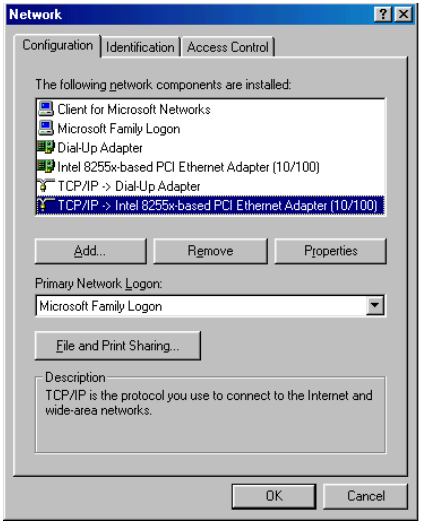

Figure 2-5

7. When the dialog box similar to Figure 2-6 appears, click the **IP Address** tab.
8. Click the **Obtain an IP address automatically** option, and then click the **OK** button.
9. In the **Network** window, click the **OK** button.
10. Restart your computer to let the changes take effect.

After configuring your Network Interface Card, you need to configure your DSL Router. See "Configuring your DSL Router" on page 4-1.

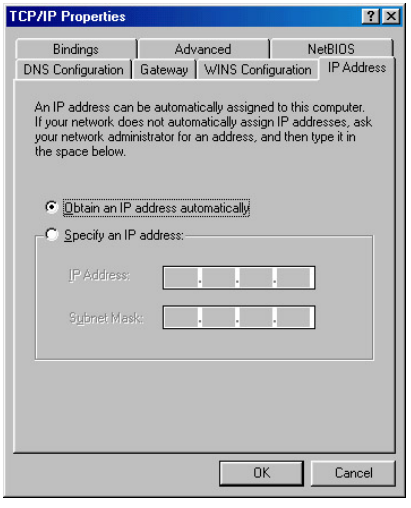
TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
Subnet Mask:
OK
Cancel

Figure 2-6

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3 Installing the USB Driver

Installing the USB Driver

Installing the USB Driver

Before using your DSL Router, you need to install the USB driver.

If you are connecting your DSL Router using the Ethernet port, skip this chapter and go to "Configuring Your Network Interface Card" on page 2-1.

In Windows XP

If you want to install the applications later, from the **Autoplay** window, click the **Exit** button and proceed to step 6 to install the USB drivers.

1. After you have set up your DSL Router, as described on page 1-3, turn on your computer.
2. Insert the Installation CD into your CD-ROM drive. The disc supports Windows Autoplay mode and starts running automatically. If the **Autoplay** window appears, click the **Yes** button to accept the Software License Agreement.
3. Select the applications that you want to install, and then click the **Next** button.
4. Follow the onscreen instructions.
5. When prompted, restart your computer.

6. When the **Found New Hardware Wizard** dialog box (Figure 3-1) appears, click the **Install from a list or specific location (Advanced)** option, and then click the **Next** button.

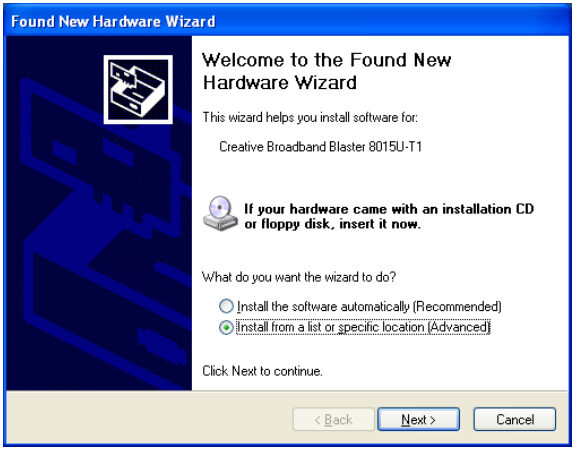
Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install software for:
Creative Broadband Blaster 8015U-T1
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

Figure 3-1

7. When the dialog box similar to Figure 3-2 appears, click the **Include this location in the search** check box to select it.
8. Click the **Browse** button to locate the driver file in **d:\Drivers\WinXP** (replace **d:** with the drive letter of your CD-ROM drive), and then click the **OK** button.
9. Click the **Next** button.

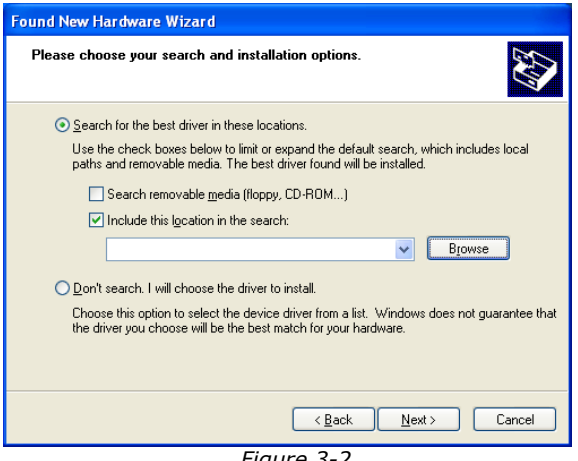
Found New Hardware Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM...)
Include this location in the search:
Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back
Next >
Cancel

Figure 3-2

10. If the dialog box similar to Figure 3-3 appears, click the **Continue Anyway** button. For more information, refer to "Difficulties In Windows XP" on page B-5.
11. Click the **Finish** button.
12. If prompted, restart your computer.

After installing the USB driver, you need to configure your DSL Router. See "Configuring your DSL Router" on page 4-1.

Hardware Installation
The software you are installing for this hardware:
Creative Broadband Blaster DSL Modem 8015U-T1
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

Figure 3-3

In Windows 2000

If you want to install the applications later, from the **Autoplay** window, click the **Exit** button and proceed to step 6 to install the USB drivers.

1. After you have set up your DSL Router, as described on page 1-5, turn on your computer.
2. Insert the Installation CD into your CD-ROM drive. The disc supports Windows Autoplay mode and starts running automatically. If the **Autoplay** window appears, click the **Yes** button to accept the Software License Agreement.
3. Select the applications that you want to install, and then click the **Next** button.
4. Follow the onscreen instructions.
5. When prompted, restart your computer.
6. When the **Found New Hardware Wizard** dialog box (Figure 3-4) appears, click the **Next** button.

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

Figure 3-4

7. When the dialog box similar to Figure 3-5 appears, click the **Search for a suitable driver for my device (recommended)** option, and then click the **Next** button.

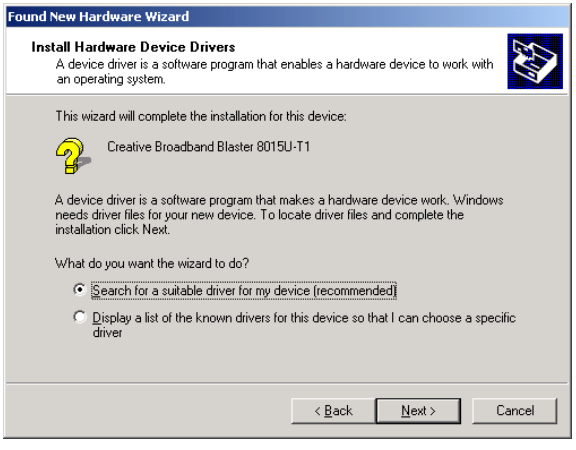
Found New Hardware Wizard
Install Hardware Device Drivers
A device driver is a software program that enables a hardware device to work with an operating system.
This wizard will complete the installation for this device:
Creative Broadband Blaster 8015U-T1
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.
What do you want the wizard to do?
Search for a suitable driver for my device (recommended)
Display a list of the known drivers for this device so that I can choose a specific driver
< Back
Next >
Cancel

Figure 3-5

8. When the dialog box similar to Figure 3-6 appears, click the **Specify a location** check box to select it, and then click the **Next** button.
9. In the dialog box that appears, click the **Browse** button to locate the driver file in **d:\Drivers\Win2K** (replace **d:** with the drive letter of your CD-ROM drive), and then click the **OK** button.
10. In the dialog box that appears, click the **Next** button.

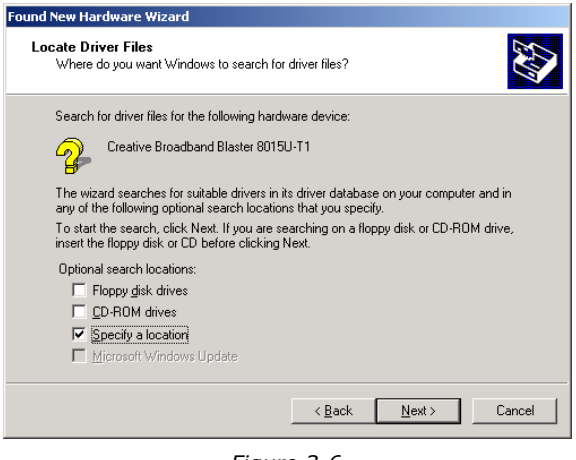
Found New Hardware Wizard
Locate Driver Files
Where do you want Windows to search for driver files?
Search for driver files for the following hardware device:
Creative Broadband Blaster 8015U-T1
The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify.
To start the search, click Next. If you are searching on a floppy disk or CD-ROM drive, insert the floppy disk or CD before clicking Next.
Optional search locations:
Floppy disk drives
CD-ROM drives
Specify a location
Microsoft Windows Update
< Back
Next >
Cancel

Figure 3-6

11. If the **Digital Signature Not Found** dialog box (Figure 3-7) appears, click the **Yes** button.
12. In the next dialog box that appears, click the **Finish** button.
13. If prompted, restart your computer.

After installing the USB driver, you need to configure your DSL Router. See "Configuring your DSL Router" on page 4-1.

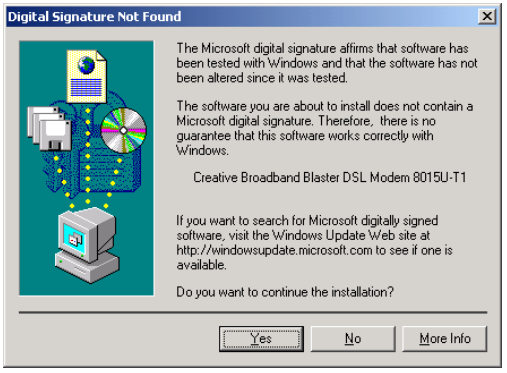
Digital Signature Not Found
The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested.
The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows.
Creative Broadband Blaster DSL Modem 8015U-T1
If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available.
Do you want to continue the installation?
Yes
No
More Info

Figure 3-7

In Windows Me

If you want to install the applications later, from the **Autoplay** window, click the **Exit** button and proceed to step 5 to install the USB drivers.

1. After you have set up your DSL Router, as described on page 1-5, turn on your computer.
2. Insert the Installation CD into your CD-ROM drive. The disc supports Windows Autoplay mode and starts running automatically. If the **Autoplay** window appears, click the **Yes** button to accept the Software License Agreement.
3. Select the applications that you want to install, and then click the **Next** button.
4. When prompted, restart your computer.
5. When the **Add New Hardware Wizard** dialog box (Figure 3-8) appears, click the **Specify the location of the driver (Advanced)** option, and then click the **Next** button.
6. When the dialog box similar to Figure 3-9 appears, click the **Search for the best driver for your device (Recommended)** option, and then click the **Specify a location** check box to select it.

Add New Hardware Wizard
Windows has found the following new hardware:
Creative Broadband Blaster 8015U-T1
Windows can automatically search for and install software that supports your hardware. If your hardware came with installation media, insert it now and click Next.
What would you like to do?
Automatic search for a better driver (Recommended)
Specify the location of the driver (Advanced)
< Back
Next >
Cancel

Figure 3-8

7. Click the **Browse** button to locate the driver file in **d:\Drivers\WinMe** (replace **d:** with the drive letter of your CD-ROM drive), and then click the **OK** button.
8. Click the **Next** button.
9. In the dialog box that appears, click the **Next** button.
10. Click the **Finish** button.
11. When prompted, restart your computer.

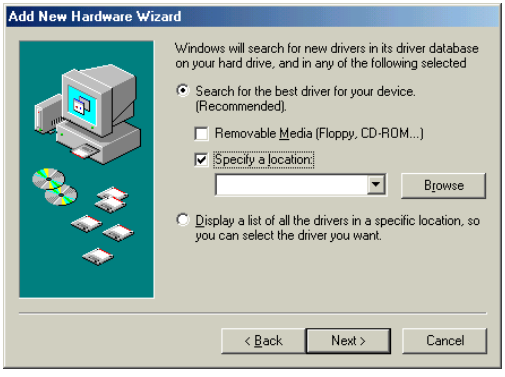
Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected
Search for the best driver for your device. (Recommended).
Removable Media (Floppy, CD-ROM...)
Specify a location:
Browse
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

Figure 3-9

After installing the USB driver, you need to configure your DSL Router. See "Configuring your DSL Router" on page 4-1.

In Windows 98 SE

If you want to install the applications later, from the **Autoplay** window, click the **Exit** button and proceed to step 6 to install the USB drivers.

1. After you have set up your DSL Router, as described on page 1-5, turn on your computer.
2. Insert the Installation CD into your CD-ROM drive. The disc supports Windows Autoplay mode and starts running automatically. If the **Autoplay** window appears, click the **Yes** button to accept the Software License Agreement.
3. Select the applications that you want to install, and then click the **Next** button.
4. Follow the onscreen instructions.
5. When prompted, restart your computer.
6. When the **Add New Hardware Wizard** dialog box (Figure 3-10) appears, click the **Next** button.

Add New Hardware Wizard
This wizard searches for new drivers for:
USB Composite Device
A device driver is a software program that makes a hardware device work.
< Back
Next >
Cancel

Figure 3-10

7. When the dialog box similar to Figure 3-11 appears, click the **Search for the best driver for your device (Recommended)** option, and then click the **Next** button.

Add New Hardware Wizard
What do you want Windows to do?
Search for the best driver for your device. (Recommended).
Display a list of all the drivers in a specific location, so you can select the driver you want.
< Back
Next >
Cancel

Figure 3-11

8. When the dialog box similar to Figure 3-12 appears, click the **Specify a location** check box to select it.
9. Click the **Browse** button to locate the driver file in **d:\Drivers\Win98SE** (replace **d:** with the drive letter of your CD-ROM drive), and then click the **OK** button.
10. Click the **Next** button.

Add New Hardware Wizard
Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
Floppy disk drives
CD-ROM drive
Microsoft Windows Update
Specify a location:
D:\
Browse...
< Back
Next >
Cancel

Figure 3-12

Windows 98 users may be prompted to insert the Windows 98 installation CD into the CD-ROM drive during installation.

11. When the dialog box similar to Figure 3-13 appears, click the **The Updated driver (Recommended)** option, and then click the **Next** button.
12. Click the **Next** button.
13. Click the **Finish** button.
14. When prompted, restart your computer.

After installing the USB driver, you need to configure your DSL Router. See "Configuring your DSL Router" on page 4-1.

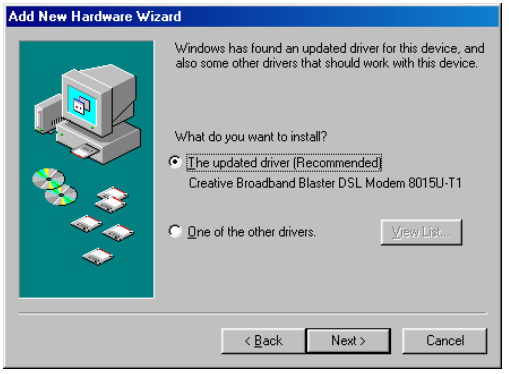
Add New Hardware Wizard
Windows has found an updated driver for this device, and also some other drivers that should work with this device.
What do you want to install?
The updated driver (Recommended)
Creative Broadband Blaster DSL Modem 8015U-T1
One of the other drivers.
View List...
< Back
Next >
Cancel

Figure 3-13

CREATIVE

BROADBAND BLASTER DSL ROUTER

4 Configuring your DSL Router

Configuring your DSL Router

Understanding DSL Router configurations

Your DSL Router can be configured in several ways. Consult your Internet Service Provider for the configuration that best suits you.

You need to configure your DSL Router just once, unless your Internet Service Provider changes the configuration settings.

Your DSL Router supports the following configurations:

- **PPPoA LLC/PPPoA VC-Mux/PPPoE LLC** — this requires a User ID and Password for authentication. For PPPoA LLC and PPPoA VC-Mux connections, your Internet Service Provider will provide you with the necessary information. For PPPoE LLC connections, encapsulation operates at the IP layer and only IP packets are routed. See "PPPoA/PPPoE Configuration" on page 4-3.
- **RFC 1483 Bridged IP** — the Internet Protocol (IP) address assigned by your Internet Service Provider is used. See "RFC 1483 Routed" on page 4-6.
- **RFC 1483 Routed IP** — a higher layer of the networking protocols (layer 3) is used to send and receive data. See "RFC 1483 Routed" on page 4-6.

Connecting to your DSL Router's Home Page

Disable any proxy server in use before accessing the DSL Router home page. See "Disabling the Proxy Server" on page 4-11.

Before proceeding, make sure that you have configured your Network Interface Card or installed the USB device drivers successfully.

You need to connect to your DSL Router's home page to configure your DSL Router.

1. If your DSL Router is connected using the Ethernet or USB port, the Link LED will light up.
2. Start your web browser, for example, Internet Explorer or Netscape Communicator.
3. In the **Address** (for Internet Explorer) or **Location** (for Netscape) box, type **http://192.168.1.1**.
4. Press the **Enter** key on your keyboard.
5. In the dialog box similar to Figure 4-1 appears, type **admin** in the **User name** box and **admin** in the **Password** box.
6. Click the **Submit** button.

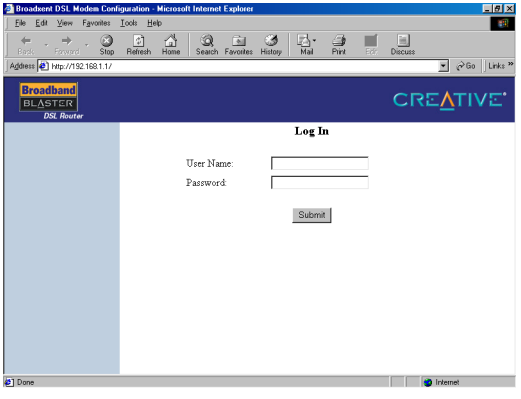

Figure 4-1

Configuring your DSL Router

PPPoA/PPPoE Configuration

If your DSL connection is charged on the basis of time online, turn off your DSL Router when it is not in use, to avoid unnecessary charges.

1. After connecting to your DSL Router's home page, move your mouse over **Configuration** on the left pane and select **System Settings**.
2. When the window similar to Figure 4-2 appears, select **PPPoA** or **PPPoE** in the encapsulation mode.
3. Type in the **VPI** and **VCI** values provided by your Internet Service Provider in their respective boxes.
4. Click the **Next** button.

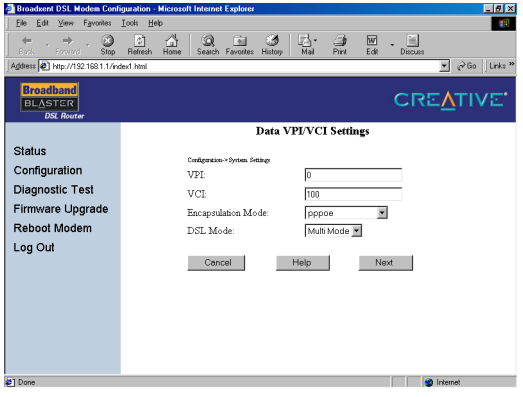

Figure 4-2

5. When the window similar to Figure 4-3 appears, type in the user name and password provided by your DSL service provider.
6. Click the **Next** button.

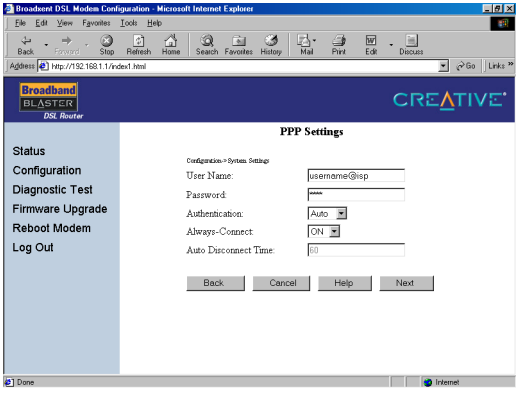

Figure 4-3

7. When the window similar to Figure 4-4 appears, select the **DHCP server Enable** option.
8. Click the **Next** button.

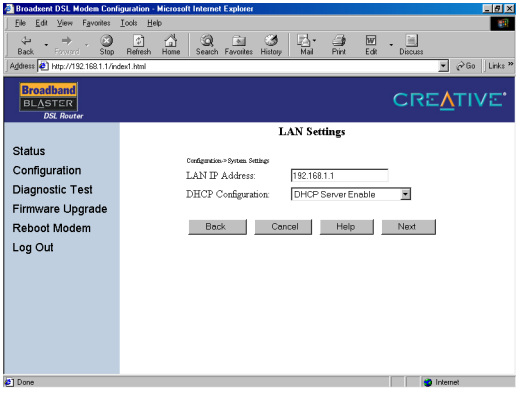

Figure 4-4

9. When the window similar to Figure 4-5 appears, click the **Next** button.

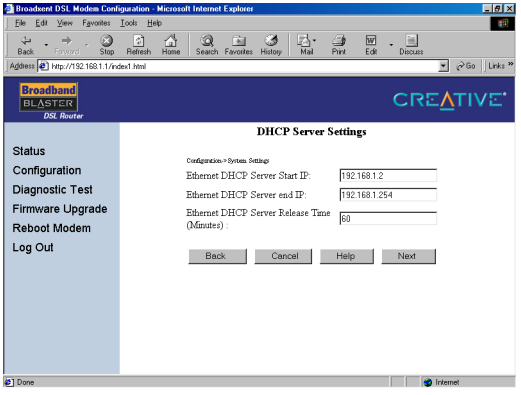

Figure 4-5

10. When the window similar to Figure 4-6 appears, check that all settings are correct. Click the **Finish** button.
11. Click the **OK** button.
12. Wait for your DSL Router to connect to the Internet.

    You can now start surfing the Internet at high speed!

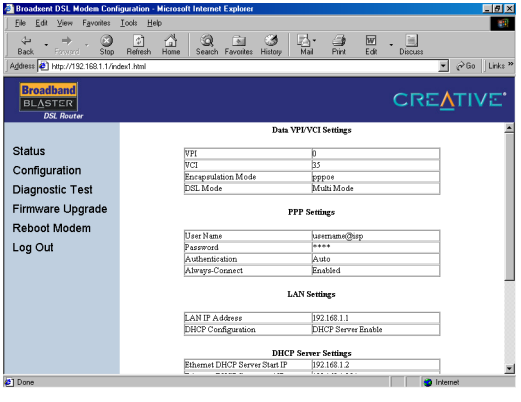

Figure 4-6

RFC 1483 Routed

1. After connecting to your DSL Router's home page, click **Configuration** on the left pane and select **System Settings**.
2. When the web page similar to Figure 4-7 appears, select **RFC 1483 Routed** in **Encapsulation Mode**.
3. Type in the **VPI** and **VCI** values provided by your Internet Service Provider in their respective boxes.
4. Click the **Next** button**.**

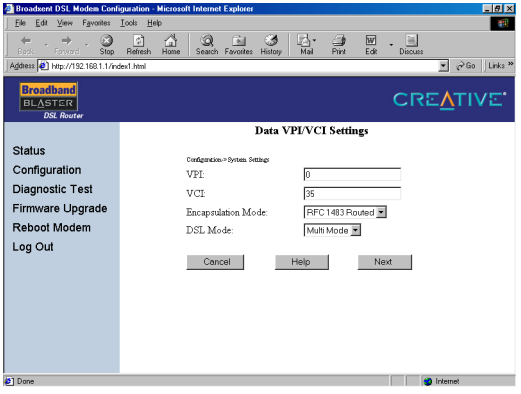

Figure 4-7

If you are using a Static WAN IP address, you must configure the WAN IP address, subnet mask, gateway and DNS IP address.

5. When the web page similar to Figure 4-8 appears, select **WAN DHCP Client** if your ISP provider is providing you with a Dynamic WAN IP address. If your ISP provider is not providing you with a Dynamic WAN IP address, click the **Next** button.

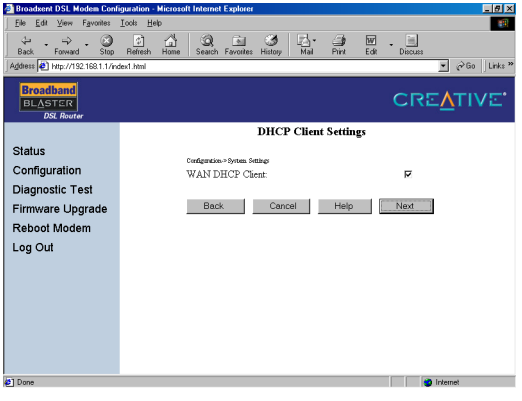

Figure 4-8

6. When the **LAN Settings** web page (Figure 4-9) appears, select the **DHCP Server Enable** option and click the **Next** button.

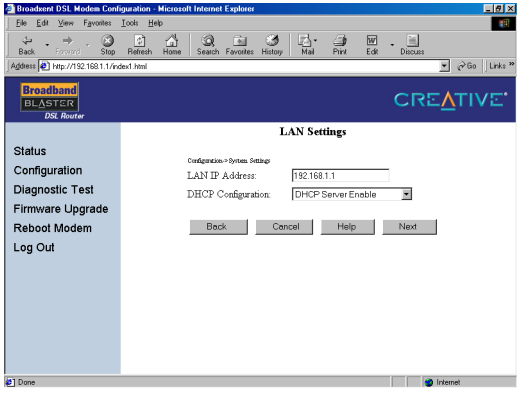

Figure 4-9

7. When the web page similar to Figure 4-10 appears, click the **Next** button.

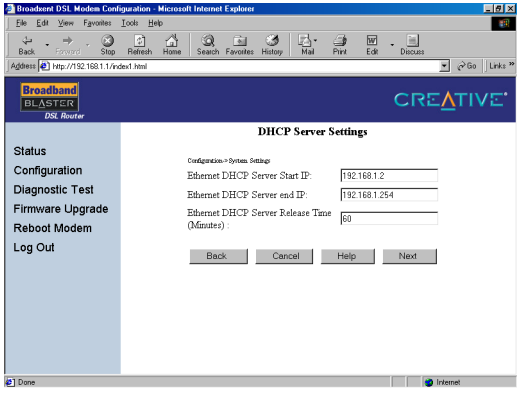

Figure 4-10

DO NOT turn off the computer or DSL Router when the DSL Router configuration is being saved.

If your DSL connection is charged on the basis of time online, turn off your DSL Router when it is not in use, to avoid unnecessary charges.

8. When the web page similar to Figure 4-11 appears, click the **Finish** button.
9. Click the **OK** button.
10. Wait for your DSL Router to connect to the Internet.

    You can now start surfing the Internet at high speed!

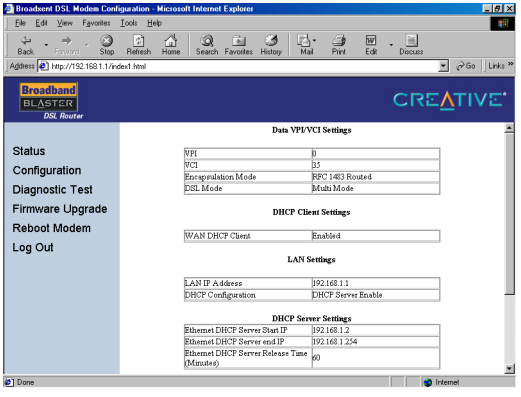

Figure 4-11

RFC 1483 Bridged IP Configuration

DO NOT turn off the computer or DSL Router when your DSL router is restarting.

If your DSL connection is charged on the basis of time online, turn off your DSL Router when it is not in use, to avoid unnecessary charges.

1. After connecting to your DSL Router's home page, click **Configuration** on the left pane and select **System Settings**.
2. When the window similar to Figure 4-12 appears, select **Bridge** in **Encapsulation Mode**.
3. Type in the **VPI** and **VCI** values provided by your Internet Service Provider in their respective boxes.
4. Click the **Next** button.

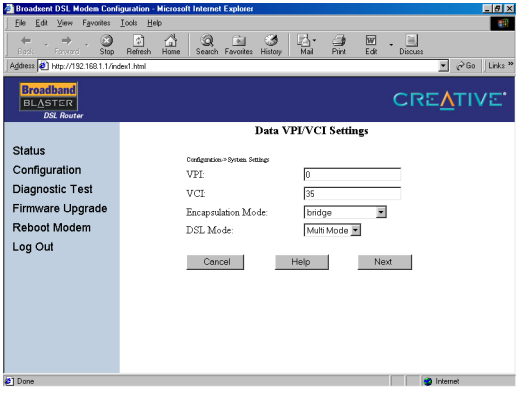

Figure 4-12

5. In the web page that appears (Figure 4-13), click the **Next** button.

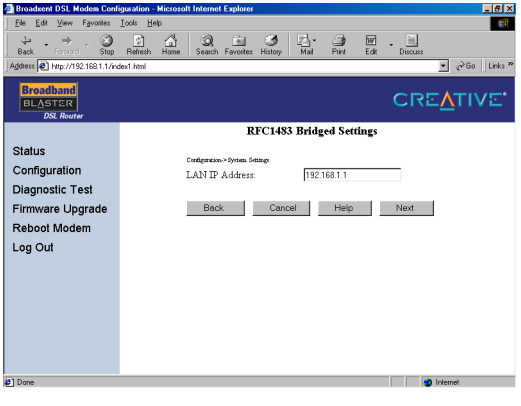

Figure 4-13

6. In the web page that appears (Figure 4-14), click the **Finish** button.
7. Click the **OK** button.
8. Wait for your DSL Router to connect to the Internet.

   You can now start surfing the Internet at high speed!

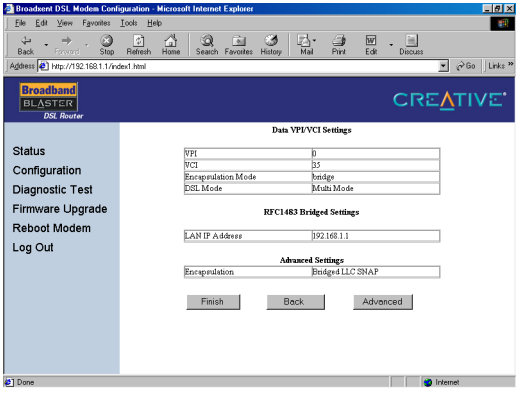

Figure 4-14

Disabling the Proxy Server

You need to disable any proxy server in use before accessing the DSL Router home page.

Using Internet Explorer

1. Start Internet Explorer.
2. From the **Tools** menu, click **Internet Options**.
3. When the dialog box similar to Figure 4-15 appears, click the **Connections** tab.
4. Click the **Never dial a connection** option to select it and click the **LAN Settings** button.

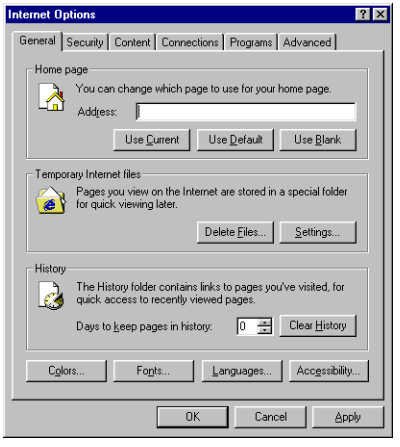

Figure 4-15

5. When the **Local Area Network (LAN) Settings** dialog box similar to Figure 4-16 appears, make sure that the **Automatically detect settings, Use automatic configuration script** and **Use a proxy server** check boxes are not selected, and then click the **OK** button.
6. In the next dialog box that appears, click the **OK** button.

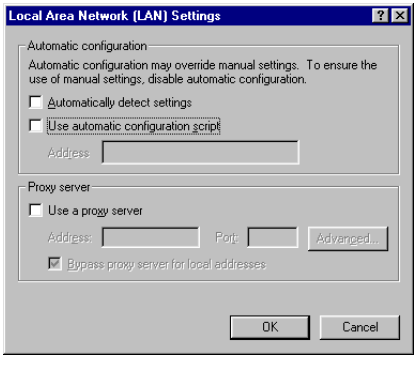

Figure 4-16

Using Netscape Communicator

Depending on your computer's settings, you may need to reset the proxy settings after accessing the DSL Router's home page.

1. Start Netscape Communicator.
2. From the **Edit** menu, click **Preferences**.
3. When the dialog box similar to Figure 4-17 appears, double-click **Advanced** on the left pane and click **Proxies**.

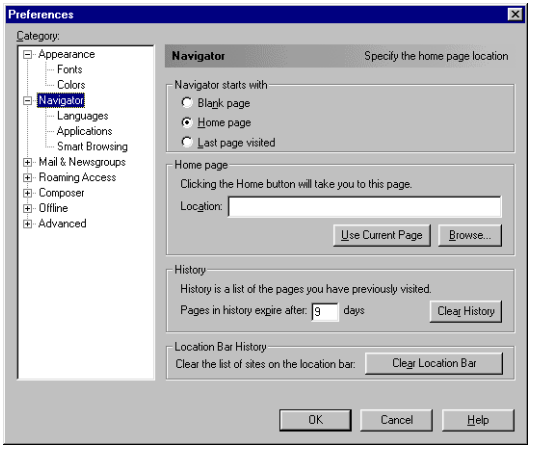

Figure 4-17

4. When the dialog box similar to Figure 4-18 appears, click the **Direct connection to the Internet** option to select it, and then click the **OK** button.

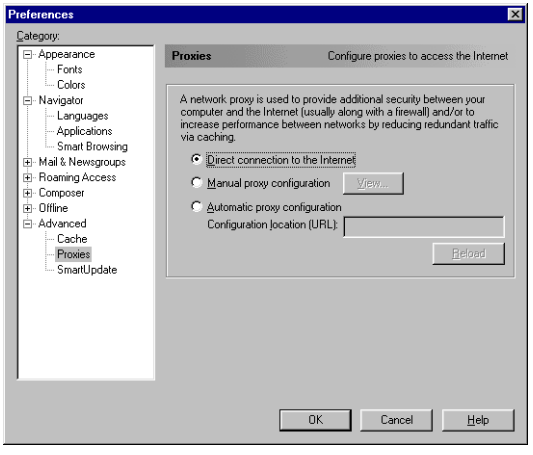

Figure 4-18

Disconnecting from the Internet

When you reconnect your DSL Router to the Internet, always make sure that you turn on your DSL Router before you turn on your computer. Wait at least 30 - 60 seconds for your DSL Router to connect to the Internet.

In PPPoA and PPPoE Mode

If you are using PPPoA or PPPoE configurations for your DSL router, you can disconnect from the Internet by turning off the main power supply to your DSL Router.

Alternatively, you can disconnect from the Internet through your DSL Router's home page:

1. Click **Status** on the left pane and select **Connection**.
2. Click the **Disconnect** button on the right pane.
3. To reconnect to the Internet, click the **Connect** button.

In RFC 1483 Routed Mode

If you have chosen RFC 1483 Routed mode for your DSL Router, you can disconnect from the Internet by turning off the main power supply to your DSL Router.

Checking your DSL Router's Status

The DSL Router web page allows you to view your DSL Router's status, such as your **DSL Line status**, **PPP Connection** status and **WAN status**. On the left pane, place your cursor over the **Status** link to select the statistic you want to view.

The DSL Router web page also enables you to perform the following tasks: **Diagnostic Test** (Loopback test and Ping test), **Firmware Upgrade**, **Reboot Modem** and **Log Out**. On the left pane, click the link of the task you want to perform.

CREATIVE

BROADBAND BLASTER DSL ROUTER

5 Configuring Advanced Features

Configuring Advanced Features

This chapter tells you how to configure your DSL Router's advanced settings.

Upgrading Firmware

To upgrade your DSL Router firmware, click the **Firmware Upgrade** link on the left pane.

1. When the web page similar to Figure 5-2 appears, click the **Browse** button.
2. Select the firmware upgrade file.
3. Click the **OK** button.

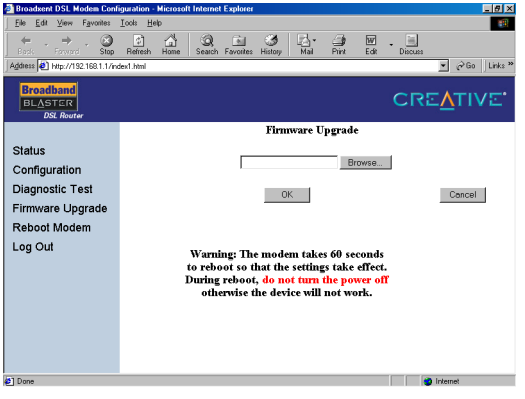
Broadband DSL Modem Configuration - Microsoft Internet Explorer
Broadband BLASTER DSL Router
CREATIVE
Firmware Upgrade
Status
Configuration
Diagnostic Test
Firmware Upgrade
Reboot Modem
Log Out
Browse...
OK
Cancel
Warning: The modem takes 60 seconds to reboot so that the settings take effect. During reboot, do not turn the power off otherwise the device will not work.

Figure 5-1

Changing Password

1. Connect to your DSL Router's home page. See "Connecting to your DSL Router's Home Page" on page 4-2.
2. Click **Configuration** -> **Advanced Settings** -> **Change Password**.
3. When the web page similar to Figure 5-2 appears, type in your new password, and then click the **Submit** button.
4. Click the **OK** button.
5. Wait for your DSL Router to restart.

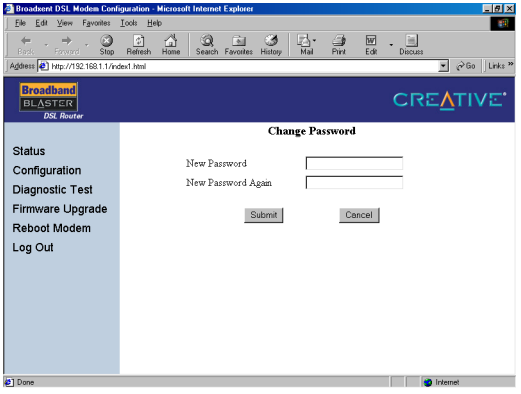

Figure 5-2

IP Address Filter

IP Address Filter allows you to filter out specified IP addresses.

1. Connect to your DSL Router's home page. See "Connecting to your DSL Router's Home Page" on page 4-2.
2. Click **Configuration** -> **Advanced Settings** -> **IP Address Filter**.
3. When the web page similar to Figure 5-3 appears, type the **LAN Client Name** and **IP Address** that you want to filter.
4. Click the **Filtered** check box to select it.
5. Click the **Submit** button.
6. Click the **OK** button.
7. Wait for your DSL Router to restart.

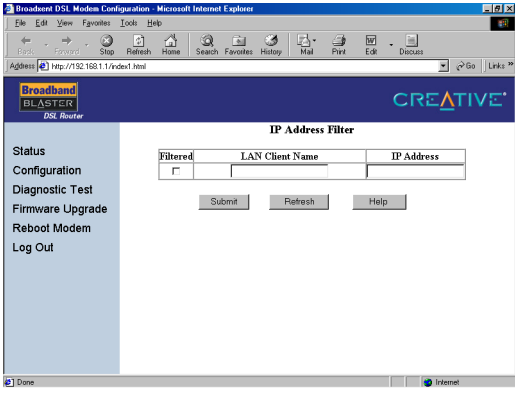

Figure 5-3

DMZ

Enabling DMZ will allow access from the Internet to your LAN and may compromise on your security.

Demilitarized Zone (DMZ) is a computer host or small network inserted as a "neutral zone" between a company's private network and the outside public network. It allows access from the Internet to the host computer.

1. Connect to your DSL Router's home page. See "Connecting to your DSL Router's Home Page" on page 4-2.
2. Click **Configuration** -> **Advanced Settings** -> **DMZ**.
3. When the web page similar to Figure 5-4 appears, click the **Enable DMZ** box.
4. In the **DMZ IP Address Setting** box, type the IP Address of the local server's computer.
5. Click the **Submit** button.
6. Click the **OK** button.
7. Wait for your DSL Router to restart.

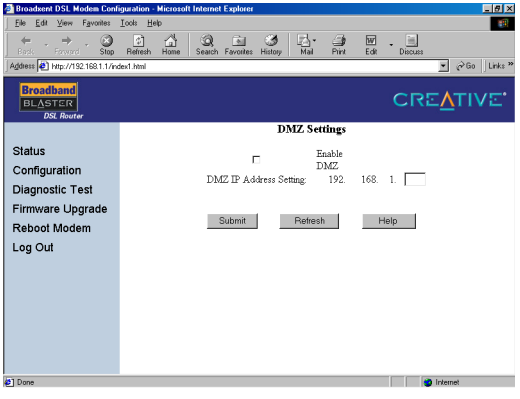

Figure 5-4

Port Forwarding

Enabling port forwarding will allow access from the Internet to your LAN and may compromise on your security.

Port forwarding, also known as port mapping, allows you to direct TCP/UDP ports to computers on your LAN. This allows access from the Internet to your LAN.

1. Connect to your DSL Router's home page. See "Connecting to your DSL Router's Home Page" on page 4-2.
2. Click **Configuration** -> **Advanced Settings** -> **Port Forwarding**.
3. When the web page similar to Figure 5-5 appears, click the check box to select it. Type the port number that you want to forward in the **Start Port Number** and **End Port Number (Optional)** boxes.
4. Select the type of port that you want to forward, for example, the **TCP**, **UDP** option.
5. In the **IP Address** box, type the IP Address of the local computer you want to forward the port to, and then click the **Add** button.
6. Click the **OK** button.
7. To forward more ports, repeat steps 3 to 5.
8. Wait for your DSL Router to restart.

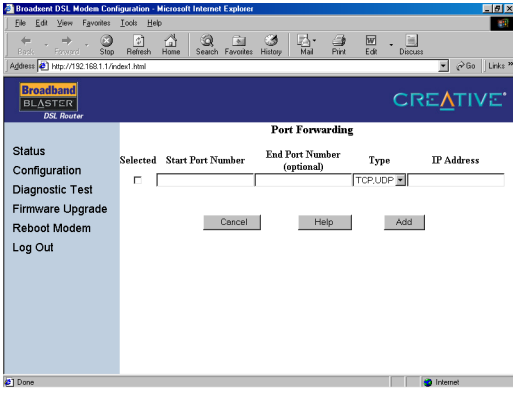

Figure 5-5

LAN Client Table

The feature allows you to add LAN clients.

1. Connect to your DSL Router's home page. See "Connecting to your DSL Router's Home Page" on page 4-2.
2. Click **Configuration** -> **Advanced Settings** -> **LAN**.
3. When the web page similar to Figure 5-6 appears, type in the **LAN Client Name** and **IP address**.
4. Click the box under **Selected** to select it.
5. Click the **Add** button.
6. Wait for your DSL Router to restart.

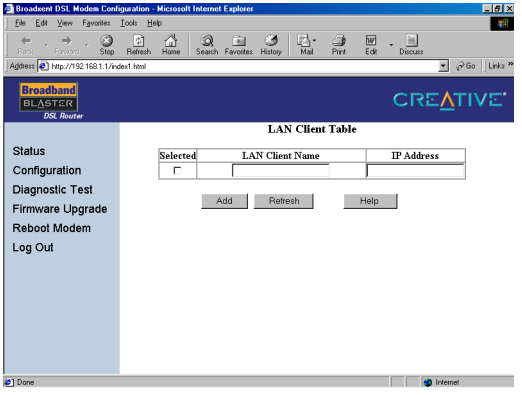

Figure 5-6

MAC Address Filtering

Media Access Control (MAC) filtering is used to block data transfer on your LAN. The MAC address of a Network Interface device is a 12 digit hexadecimal number that is unique.

1. Connect to your DSL Router's home page. See "Connecting to your DSL Router's Home Page" on page 4-2.
2. Click **Configuration** -> **Advanced Settings** -> **MAC Address Filter**.
3. When the web page similar to Figure 5-7 appears, under **Add**, click the box to select it.
4. In the **Source MAC** and/or **Destination MAC** box, type the MAC Address of the Network device.
5. Select **Protocol** and **Mode** settings.
6. Click the **Submit** button.
7. Click the **OK** button.
8. Wait for your DSL Router to restart.

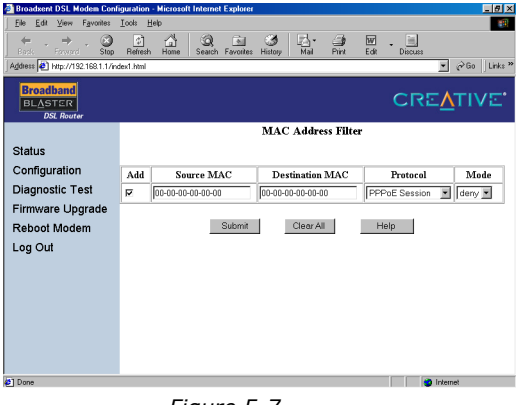

Figure 5-7

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A Technical Specifications

Technical Specifications

This section provides certain technical specifications for your Creative Broadband Blaster DSL Router 8015U.

Data Encapsulation Protocol	❑ RFC 2684/1483 Bridge/Routed, PPPoA, PPPoE
ADSL Line Interface	❑ ANSI T1.413 issue 2 ❑ ITU-T G.992.1 (G.DMT) ❑ ITU-T G.992.2 (G.LITE) ❑ ITU-T G.992.3, G.992.4 (ADSL 2) ❑ ITU-T G.992.5 (ADSL 2+)
Electrical	❑ Power adapter with output 16 V AC, 750 mA
Interface	❑ Ethernet 10/100 Base-T (LAN). MDI-X ❑ RJ-11 (WAN) ❑ USB 2.0 Full Speed
Dimensions	❑ Length: 145 mm / Width: 125 mm / Height: 30 mm
Compliance	❑ IEC 60950 ❑ CE EN55022 ❑ CE EN55024 ❑ CB ❑ FCC Part 15B ❑ FCC Part 68 ❑ UL

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BROADBAND BLASTER DSL ROUTER

B Troubleshooting

Troubleshooting

If you have a technical problem with this product, you may wish to consult our self-help tool "Knowledgebase" for online troubleshooting and solutions. Go to **www.creative.com** and select your region.

Connection to your DSL Router's home page

The Web browser does not connect to the DSL Router home page.

You are not using the correct IP address.

Try the following:

- ❑ Be sure that you have typed the default IP address as 192.168.1.1.
- ❑ Check your network device's IP address:

In Windows XP/2000:

1. Click **Start** -> **Programs/All Programs** -> **Accessories** -> **Command Prompt**.
2. In the window that appears, type **ipconfig/release**, and then press the **Enter** key.
3. Type **ipconfig/renew**, and then press the **Enter** key.
4. Be sure that the IP Address is **192.168.1.x**. **x** may be any number between 2 and 254.

In Windows Me/98 SE:

1. Click **Start** -> **Run**.
2. In the window that appears, type **winipcfg**, and then click the **OK** button.
3. Under **Ethernet Adapter Information**, click your network adapter.
4. Click the **Release** button, and then click the **Renew** button.
5. Be sure that the IP Address is **192.168.1.x**. **x** may be any number between 2 and 254.

Connection to the Internet

My DSL Router does not connect to the Internet.

You did not set up your DSL Router correctly.

Try the following:

- ❑ Be sure that if your DSL Router is connected to your computer through a hub, you are using a crossed Ethernet cable.
  Also, be sure that you have configured your DSL Router correctly. For more information, see "Configuring your DSL Router" on page 4-1.
- ❑ If your computer is connected to your DSL Router using a USB cable, be sure that you have installed the USB driver.
- ❑ Be sure that the power adapter is plugged in securely and the power is turned on.
- ❑ Be sure that the phone line from the telephone wall outlet is connected securely to the LINE connector of your DSL Router.
- ❑ Be sure that you have subscribed with a Internet Service Provider.
- ❑ Be sure that the Ready LED is turned on.
- ❑ If you are required to specify your WAN IP address, be sure that you have typed the values for IP address, Subnet Mask, Gateway and DNS Server provided by your Internet Service Provider correctly.

LED Status

Observe the LEDs on your DSL Router to check if the device is functioning properly.

Normal Setup Status

When your DSL Router is turned on, the Power LED lights up. After several seconds, all the LEDs will go into their correct states. See "Installing your DSL Router" on page 1-1 for more information.

The Power LED on my DSL Router does not turn on.

Your DSL Router is not properly powered by an external power source.

Try the following:

- ❑ Check both ends of the DC adapter cable connection to see if the connectors are firmly plugged into both the telephone wall outlet and your DSL Router.
- ❑ Be sure that you have turned on the power outlet connected to your DSL Router.
- ❑ Be sure that you are using the power adapter provided.

The Link LED on my DSL Router does not turn on after I connect my DSL Router and computer with the Straight Ethernet cable.

Your DSL Router is not properly connected to your computer.

Try the following:

- ❑ Check both ends of the Straight Ethernet cable and be sure that they are plugged in securely.
- ❑ Be sure that you have used a Straight Ethernet cable. However, if you are connecting to more than 2 computers through a hub, you may need to use a crossed Ethernet cable to connect your DSL Router to your hub.
- ❑ Be sure that you have configured your Network Interface Card correctly.

The Link LED on my DSL Router is turned on and is unable to access the Internet.

Your DSL Router may not be properly configured. See topic "My DSL Router does not connect to the Internet." on page B-2.

The Ready LED on the DSL Router keeps flashing.

There is no DSL service subscription.

There is too much noise on your telephone line.

Your Internet Service Provider may be experiencing problems.

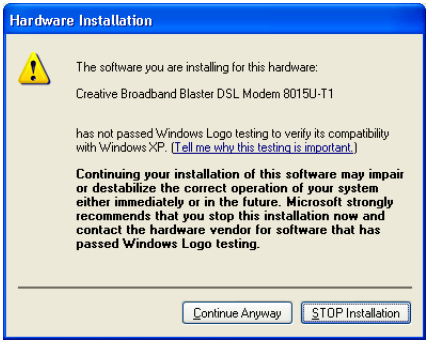
Check on the following:

- ❑ Be sure that the telephone cable is connected correctly to your DSL Router.
- ❑ Try connecting again after a few minutes as external interference can cause disruptions to your DSL line.
- ❑ Attach microfilters to all phone jacks connected to analog devices sharing the same line as your DSL connection. Examples of analog devices include telephones, analog modems and fax machines.
- ❑ Be sure that you have a subscription with a Internet Service Provider.
- ❑ Check with your Internet Service Provider.

Difficulties In Windows XP

A Hardware Installation error message appears on a Windows XP operating system when a driver is being installed.

At the time of this product's release, Microsoft strongly encouraged companies to submit their hardware solutions for certification. If a hardware device driver is not submitted, or does not qualify, for Microsoft certification, a warning message similar to the one below appears.


Hardware Installation
The software you are installing for this hardware:
Creative Broadband Blaster DSL Modem 8015U-T1
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

You may see this message when installing this driver or update. If you do, you may choose to click the **Continue Anyway** button. Creative has tested this driver on Windows XP, and it does not impair or destablize your computer.

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BROADBAND BLASTER DSL ROUTER

C Frequently Asked Questions

Frequently Asked Questions

Can my DSL Router work with Operating Systems other than Windows?

Yes, if you are connecting your DSL Router using the Ethernet port. Ethernet port connection is operating system independant. Currently, Technical Support only provides support for Windows-based operating systems.

If you are, however, connecting your DSL Router using the USB port, your DSL Router will only work with Windows XP, Windows 2000, Windows Me and Windows 98 SE.

How can I check whether I have either Static or DHCP IP addressing?

Consult your DSL Service Provider.

Which Ethernet card is compatible with my DSL Router?

Your DSL Router is compatible with virtually any Network Interface Card.

Which protocol does my DSL Router support?

Currently, TCP/IP is the only protocol standard for the Internet and has become the global standard for communications.

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D Glossary

Glossary

This section offers a short explanation of some of the common networking and DSL terminologies.

ADSL — Asymmetric Digital Subscriber Line — A Digital Subscriber Line (DSL) technology that allows digital data to be sent over existing telephone lines. Though many different DSL technologies have been developed, ADSL is the most popular among individuals and small businesses because it offers higher downstream (or download) than upstream (or upload) data rates.

Bridge — A hardware device that links two or more LANs and manages the transfer of data between these LANs. The two networks being connected can be alike or dissimilar.

Broadband — A transmission media that can handle the transmission of multiple messages, at different frequencies, at one time. Broadband signals use analog carriers.

DHCP — Dynamic Host Configuration Protocol — A method of assigning a temporary IP address to a host, such as a computer, connected to a specific network. With dynamic addressing, a particular host has a different IP address each time it connects to the network.

DNS — Domain Name System — This allows you to specify a symbolic name, a meaningful and easy-to-remember "handle," instead of an IP address. The DNS is the way that Internet domain names are located and translated into Internet Protocol addresses.

Downstream — Data transferred from the telecommunication network to the customer's premises.

DSL	Digital Subscriber Line — A technology that transforms ordinary telephone lines into high-speed digital lines for fast Internet access. This technology uses a digital coding technique to get large capacity out of existing phone lines without interfering with regular services — one can use the phone and surf the Internet at the same time. In this way, DSL provides simultaneous Internet and voice/fax capabilities over a single telephone line without any interference.
Ethernet	A local-area network (LAN) protocol that supports data transfer rates of 10 Mbps. It is one of the most widely implemented LAN standards that operates using the twisted pair or coaxial cable. A version of Ethernet, called 100 Base-T (or fast Ethernet), supports data transfer rates of 100 Mbps.
G.dmt	An industry standard known as G.992.1, which refers to ADSL technology that uses DMT modulation and that does not require a splitter box to be installed at the user's premises. This technology supports downstream data rates of up to 8 megabits per second and upstream data rates of up to 960 kilobits per second.
G.Lite	A "splitterless" ADSL technology that uses CAP or DMT modulation, and supports downstream data rates of up to 1.5 megabits per second and upstream data rates of up to 384 kilobits per second.
Hub	A device used for connecting nodes in a star topology, that is, all the nodes are connected to a central hub. A passive hub simply organizes the wiring, while an active hub also regenerates and retransmits signals.
Internet	The world's largest computer network, which links computers and networks that communicate via the standard TCP/IP protocol.

IP Address	The address for a computer on a TCP/IP network. An IP address identifies a particular machine on a network. The format of an IP address is a 32-bit numeric address written as four numbers separated by periods. Each number can be 0 to 255, for example, 11.160.10.240 is an IP address. Any machine connected to the Internet is assigned an IP address.
ISP	Internet Service Provider — An organization that provides Internet access to computer users.
LAN	Local Area Network — A computer network that spans a relatively small area. Most LANs are confined to an office, single building, or group of buildings.
Mbps	Megabits per second — A measure of data transfer speed.
NIC	Network Interface Card — A card that is installed in a computer so that it can be connected to a network. The NIC manages the flow of network information to and from the computer.
Packet	A unit of information, which is data of a fixed length, sent as a whole from one device to another on a network. It contains a header with a destination address and control information, and a payload that has the user data.
PING	'Packet Internet Groper — An Internet program used to determine whether a specific IP address is accessible. It works by sending a packet to the specified address and waiting for a reply. PING is used primarily to troubleshoot network connections.
PPP	Point-to-Point Protocol — A communication protocol that allows a computer to be connected to the Internet.
Protocol	A set of agreed-upon rules for transmitting data between two devices. A computer must support the right protocols in order to communicate with other computers.

RFC 1483	A standard method for linking different devices across networks and which assures "interoperability".
RJ-11	A connector/socket for two pairs (four wires) of twisted pair cables that is used primarily to connect telephone equipment.
Router	A hardware device connecting two separately functional networks that use the same or different protocols. Routers look at the destination addresses on data packets, and then decide which route to send them on.
Subnet Mask	A 32-bit string of a TCP/IP address — one part of which is the network address and another part of which is the host address. A Subnet Mask is usually represented in dotted-decimal notation, for example, 255.255.255.0.
TCP/IP	Transmission Control Protocol/Internet Protocol. A suite of communication protocols that is used by computers or networking devices on the Internet so that they can communicate with each other. TCP/IP uses several protocols, the two main being TCP and IP.
VPI	Virtual Path Identifier — A numerical value assigned by your Internet Service Provider to your DSL device to ensure proper connection with the DSL equipment at the telephone company's office.
VCI	Virtual Channel Identifier — A numerical value assigned by your Internet Service Provider to your DSL device. VCI goes hand in hand with VPI to ensure connection with your Internet Service Provider's equipment.
WAN	Wide Area Network — A computer network that spans a relatively large geographical area. Typically, a WAN consists of two or more LANs.